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THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of: **TANABE, Kosuke et al.**

Group Art Unit: 1771

Serial No.: 10/020,947

Examiner: **Victor S. Chang**

Filed: **December 19, 2001**

P.T.O. Confirmation No.: **8640**

For: **DOUBLE COATED PRESSURE SENSITIVE ADHESIVE SHEET HAVING
AN EXCELLENT SHOCK RESISTANCE**

SUBMISSION OF APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

January 27, 2005

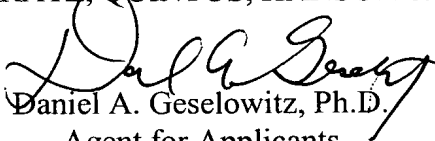
Sir:

Submitted herewith is one copy of an Appeal Brief in the above-identified U.S. patent application.

Also enclosed is a check in the amount of **\$500.00** to cover the cost of filing this Appeal Brief. In the event that any additional fees are due with respect to this paper, please charge Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP


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PATENT TRADEMARK OFFICE

Enclosures: Appeal Brief; and check for **\$500.00**



THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

APPEAL BRIEF FOR THE APPELLANTS

Ex parte Kasuke TANABE et al. (applicants)

Serial Number: **10/020,947**

Filed: **December 19, 2001**

Appeal No. : To be assigned

Group Art Unit: **1771**

Examiner: **Victor S. Chang**

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PATENT TRADEMARK OFFICE

Date: January 27, 2005

Atty. Docket No. **011723**



**THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Appeal No: **To be assigned**

In re the Application of: **TANABE, Kosuke et al.**

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For: **DOUBLE COATED PRESSURE SENSITIVE ADHESIVE SHEET HAVING AN
EXCELLENT SHOCK RESISTANCE**

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

January 27, 2005

Sir:

Further to the Notice of Appeal filed on November 29, 2004, the following Appeal Brief is
respectfully submitted.

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I. REAL PARTY IN INTEREST

The real party in interest is Dainippon Ink and Chemicals, Inc., of Tokyo, Japan, as evidenced by the assignment recorded on December 19, 2001, at reel 012389, frame 0267.

II. RELATED APPEALS AND INTERFERENCES

Appellant is aware of no related prior or pending appeal, interference, or judicial proceeding that may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-8 are pending in this application. Claims 1-8 stand rejected, and claims 1-8 are under appeal.

IV. STATUS OF AMENDMENTS

No amendment has been made subsequent to the final Office action of September 8, 2004.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1. Claim 1 recites: “An electronic device structure, comprising: an electronic device having a part”. The invention is therefore a portion of or an entire electronic device, and can apply to any of a variety of electronic devices, for example, cellular phones (page 1, line 20). The “part” (page 1, line 22; page 2, line 9) can refer to any physical part of the device which is adhered to another portion of the electronic device.

Claim 1 further recites: “a double coated pressure sensitive adhesive sheet affixed to said part of the electronic device”. Double coated pressure sensitive adhesive sheets are discussed with regard to the background art on page 1, line 21, and with regard to the invention on page 2, lines 12, 17, etc.

Claim 1 recites “an adhesive layer, which is provided on at least one surface of said double coated pressure sensitive adhesive sheet”, that is, one of the adhesive layers of the double coated pressure sensitive adhesive sheet (page 2, line 17).

Finally, claim 1 recites two specific physical characteristics relating to the parameter “maximum of loss tangent” of the adhesive layer:

a) “having a maximum of loss tangent in a frequency region equal to or larger than a maximum characteristic frequency generated by a shock when said electronic device falls” (page 2, lines 12-15)

b) “the maximum of the loss tangent being equal to or greater than 1” (page 2, lines 15-16).

The parameters “characteristic frequency region” and “loss tangent” are known in the art, but are also defined on page 3, line 3, to page 4, line 11. Measurement of these parameters is disclosed on page 8, lines 7-11, and in the examples on page 10, line 23, to page 11, line 19.

The invention meeting the two recited limitations on the values of these parameters has excellent shock resistance, such that the adhered part is unlikely to detach (page 2, lines 8-10). The double coated pressure sensitive adhesive sheet of the invention therefore differs from conventional double coated pressure sensitive adhesive sheets (page 1, line 21, to page 2, line 5).

Claim 2. Claim 2 further limits the value of the parameter “maximum of loss tangent” of the adhesive layer to greater than 10^3 Hz at 25° C (page 4, lines 18-19).

Claims 3 and 4. Claim 3 limits the electronic device of claim 1 to be a portable telephone. Claim 4 limits the electronic device of claim 2 in this manner. Portable telephones are discussed in the specification on page 8, line 14.

Claim 5. Claim 5 recites a double coated pressure sensitive adhesive sheet. Double coated pressure sensitive adhesive sheets are discussed with regard to the background art on page 1, line 21, and with regard to the invention on page 2, lines 12, 17, etc.

The adhesive sheet comprises an adhesive layer on at least one surface, having the following characteristics: “having a maximum of loss tangent, at 25°C, in a frequency region equal to or larger

than 10^3 Hz, the maximum of the loss tangent being equal to or greater than 1". As noted above for claim 1, the parameters of "characteristic frequency region" and "loss tangent" are known in the art, and are also defined on page 3, line 3, to page 4, line 11. The " 10^3 Hz" limitation is disclosed on page 4, lines 18-19, of the specification.

Claim 5 further recites a compositional limitation for the adhesive layer, that the adhesive layer comprises "an acrylic copolymer containing, as a monomer component, acrylate including an alkyl group having 2-14 carbon atoms." Support for this recitation is found in the specification, for example on page 6, lines 6-8.

Claim 6. Claim 6 limits the device of claim 5 to be a portable telephone (specification, page 8, line 14).

Claims 7 and 8. Claim 7 further limits the frequency region recited in claim 1 to be equal to or greater than 10^4 Hz, and claim 8 limits this to be equal to or greater than 10^5 Hz. Support may be found in the specification on page 6, lines 2-3, of the specification.

VI. GROUNDS OF REJECTION TO BE REVIEWED

Claims 1-8 are rejected under 35 U.S.C. 102(b) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over Lindman et al. U.S. Patent No. 5,974,655.

VII. ARGUMENTS

In paragraph no. 4 of the final Office action of September 8, 2004, the Examiner states the rejection of claims 1-8 under 35 U.S.C. 102(b) or 103(a) over Lindman et al. with reference to the Office action of April 28, 2004, and with “additional observations” that address Applicant’s arguments in the Amendment dated July 19, 2004. The Office action of April 28, 2004, in turn, states a rejection of claims 1-4 (apparently meant to cover claim 1-6) under 35 U.S.C. 102(b) or 103(a), with further reference to the rejection of claims 1-4 under 35 U.S.C. 102(b) or 103(a) in paragraph no. 5 of the Office action of November 28, 2003. This rejection, in turn, refers back to the rejection of claims 1-4 under 35 U.S.C. 102(b) in paragraph no. 2 of the first Office action of June 27, 2003.

Since some of the Examiner’s arguments are not repeated through the series of Office actions, Appellant here organizes the arguments of appeal by in a series of points addressing issues raised during the prosecution of the application. These arguments will specifically point out that the Examiner has not properly stated a case of anticipation or obviousness in accordance with 37 CFR 1.104(c) and (d), and that there is no anticipation of the pending claims by, and no *prima facie* case of obviousness can be made over, Lindman et al. U.S. Patent No. 5,974,655 (“Lindman”).

Point 1. Examiner’s inherency rejection regarding “maximum of loss tangent” limitations is improper.

In the first Office action of June 27, 2003, the Examiner summarizes Lindman as being directed to a method of simplifying the manner in which a loudspeaker is mounted on a circuit board, for devices such as a telephone. The Examiner states that:

“Although Lindman is silent about the maximum loss tangent [sic] being equal to or greater than 1 in a frequency region equal to or greater than 10^3 Hz, it is noted that **the scope of the invention is essentially the same as the instantly claimed invention**, as such an adhesive layer having a suitable maximum loss tangent is believed to be **inherently** disclosed.” (emphasis added)

Applicant therefore considered this to be an inherency rejection, and responded noting that MPEP 2112 states, in part:

“The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993)(reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981).

“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) ...”

Applicant argued in part (Response of September 15, 2003, page 3, line 16) that the Examiner had not properly provided “a basis in fact and or technical reasoning,” that is, that the inherency rejection was **improper**. Applicant presented additional analysis of Lindman indicating that the claimed limitations are not inherent in the reference. This analysis will be discussed below under subsequent headings.

In the Office Action dated November 28, 2003, the Examiner addressed the inherency issue on page 4, lines 3-7, now stating:

“As such, although Lindman is silent about the maximum loss tangent [sic], since the scope of the invention is essentially the same as the instantly claimed invention, **it is believed** that an adhesive layer having a suitable maximum loss tangent [sic] **is either inherently disclosed or an obvious optimization** to one of ordinary skill in the art.” (emphasis added)

Applicant again argued that the Examiner’s inherency argument was improper, in the Amendment of March 24, 2004, on pages 6-7 (in particular on page 7, line 2). In particular, the Examiner’s argument appeared to be based on the general statement that “the scope of [Lindman’s] invention is essentially the same as the instantly claimed invention,” without any cited portions of Lindman to support this statement, and with this statement possibly being antithetical to the Examiner’s own admission that “Lindman is silent regarding” the recited limitations. Apparently, by “scope”, the Examiner meant “purpose.”

The inherency issue was addressed by the Examiner again in the Office action of April 28, 2004, on page 3, line 3 and ff. The Examiner now appears to present a basis in technical reasoning, that Lindman requires that a double-sided adhesive annulus “[maintain] requisite sealing and damping ...” and be “sufficiently strong to resist comprehensive shaking forces.” The Examiner then states:

“As such, although Lindman is silent about the “maximum loss tangent” [sic] value of the double sided adhesive annulus, since the scope of the invention is essentially the same as the instantly claimed invention, it is believed that an adhesive layer

having a suitable maximum loss tangent is either inherently disclosed by Lindman, or an obvious optimization”

Applicant again argued (Amendment of July 19, 2004) that this was an improper inherency rejection.

The Examiner’s arguments in this regard are effectively repeated on pages 3-4 of the final Office action of September 8, 2004. In this regard, the Examiner first discusses Lindman’s teaching that:

“a loudspeaker is mounted on a circuit board while maintaining requisite sealing and damping between the loudspeaker and the circuit board, the loudspeaker is affixed directly to the circuit board (1) by means of a double-side adhesive annulus (3)”

The Examiner emphasizes the application in Lindman to a telephone, and the phrases “maintaining requisite sealing and damping” and “double-sided adhesive.” However, Appellant again submits that there is no suggestion in the phrase “sealing and damping” for the limitations on the maximum of loss tangent of the present claims. Moreover, the term “requisite” is not explicitly explained, and cannot even provide a motivation to achieve any particular values of “sealing and damping.”

The Examiner then states:

“It should be noted that where the claimed and prior art products are substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of obviousness has been established.”

To summarize, the Examiner’s early rejections were based on the argument that Lindman’s invention and the present claims have a similar **scope**, i.e., purpose, and therefore they must be the

same. Applicant respectfully submits that such an argument is **improper**: the purpose served by an invention does not define an invention. (Appellant also disagrees that the purpose is the same in Lindman and the present invention, a point which will be discussed below under a subsequent heading.)

In the final Office action of September 8, 2004, these arguments are restated under the broad brush of the present invention being “substantially identical in structure or composition” to the Lindman reference, without citation of the reference to support this. (Again, Appellant disagrees with the Examiner in this regard, and arguments to this effect are presented under subsequent headings). Appellant’s argument in this portion of the Appeal Brief is that the Examiner’s inherency arguments are **improper**. **Appellant therefore argues that a proper case of anticipation of the recited “maximum of loss tangent” limitations has not been made.** This is relevant to all of the pending claims, since all of the claims recite limitations on the “maximum of loss tangent.”

The teachings of the Lindman reference are discussed in detail under a subsequent subheading in reference to the rejection under 35 U.S.C. 103(a).

Point 2. Examiner’s inherency rejection regarding composition limitations of claims 5 and 6 is improper.

The Examiner addressed added claims 5 and 6 on page 4 of the Office action of April 28, 2004, stating that:

“double sided pressure sensitive adhesive of acrylic copolymer is notoriously common and well known, as evidenced by Applicants’ admission that known acrylic or rubber type adhesive compositions can be used (see paragraph [0021]). As such, in the absence of unexpected results, it is believed that a suitable acrylic copolymer comprising a suitable alkyl group is also either implicitly disclosed by Lindman, or an obvious selection and/or optimization”

In response, Applicant argued (July 19, 2004) that Applicant had **not** admitted that prior art double coated pressure sensitive adhesive sheets used the recited adhesive composition. Applicant also noted that the statement that “double sided pressure sensitive adhesive of acrylic copolymer is notoriously common and well known” was an inherency rejection based on personal knowledge, and Applicant called in that response for an affidavit under 37 CFR 1.104(d)(2), which states:

(2) When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

In the final Office action of September 8, 2004, the Examiner declined to provide an affidavit (page 4, second paragraph), stating:

“evidence has already been provided by Applicants’ own admission that adhesive compositions of acrylic or rubber type are known art (paragraph [0021] at page 4 of Office action dated 4/28/2004.”

Appellant here respectfully argues that Applicant’s request for an affidavit was proper under 37 CFR 1.104(d)(2), and that **the Examiner’s refusal to provide the affidavit was improper.**

Specifically, the issue at hand is not whether “adhesive compositions of acrylic type are well known,” but whether an **adhesive layer of a double coated pressure sensitive sheet**, comprising

an acrylic copolymer containing, as a monomer component, acrylate including an alkyl group having 2-14 carbon atoms, and having a maximum of loss tangent, at 25°C, in a frequency region equal to or larger than 10^3 Hz, the maximum of the loss tangent being equal to or greater than 1, is known. Appellant has clearly **not** admitted this, and, in fact, implies in the specification that no such double coated pressure sensitive adhesive sheets are known. The Examiner refers to paragraph [0021] of the specification, that is, page 6, lines 5-13. However, the first line of this paragraph states: “As for an adhesive composition forming an adhesive layer, it is possible to use known acrylic or rubber type adhesive compositions.” That is, although certain acrylic adhesives are known, there is no disclosure that double coated pressure sensitive adhesive sheets using these acrylic adhesives are known.

Applicant therefore submits that the Examiner has not stated a proper inherency rejection nor a rejection over Applicant’s admissions, for claims 5 and 6.

Point 3. The “maximum of loss tangent” limitations in the claims are not obvious over Lindman.

As discussed above, the initial rejection of claims 1-4 over Lindman in the Office action of June 27, 2003, was as anticipated under 35 U.S.C. 102(b), on the basis of inherency. In response to Applicant’s arguments against the inherency rejection in the Response dated September 15, 2003, the rejection over Lindman was stated under 35 U.S.C. 102(b)/103(a).

The Examiner has stated several times that “Lindman is silent” regarding the “maximum of loss tangent” limitations of the present claims, and Appellant has addressed above the issue of inherency, arguing that the inherency rejection was improperly made. Appellant submits that the present claims cannot be considered to be inherent over Lindman, and given the lack of disclosure in Lindman, are **clearly not anticipated by the reference**. Appellant here addresses the issue of obviousness of the claims under 35 U.S.C. 103(a) over Lindman.

The Examiner’s main argument that the recited “maximum of loss tangent” limitations are obvious over Lindman is based on the Examiner’s statement that “**it is believed** that an adhesive layer having a suitable maximum loss tangent [sic] **is either inherently disclosed or an obvious optimization** to one of ordinary skill in the art” (emphasis added) in the Office action of November 28, 2003.

Lindman discloses use of “adhesive annulus 3” in column 2, line 16. Applicant had argued that Lindman does not disclose any performance limitations on the adhesive of the adhesive annulus; that is, no values of the maximum of loss tangent parameter nor related measurable parameters are given.

Lindman discloses in column 2, line 26-31, that

“It has been found that the bond afforded by a double adhesive annulus, ie an annulus that is adhesive on both sides, is sufficiently strong to resist comprehensive shaking forces, without requiring the assistance of additional fasteners such as screws to this end. Mounting of the loudspeaker is thus a relatively simple process that requires no further connecting means. When the tape used is more or less elastic, it can be used as a soft loudspeaker suspension, therewith obviating the need to use typical rubber

packings to this end. The use of hard and non-elastic material is also conceivable, although this use will depend on the application of the invention.”

However, this portion of the reference does not appear to generally address mechanical properties of the annulus. Lindman never discloses where the annulus is obtained or how it is made. One must, therefore, conclude that Lindman has simply used an available prior art double adhesive annulus, which is generally suitable for Lindman’s purpose: “resisting comprehensive shaking forces”. However, exactly what these shaking forces might entail, and what “resisting” entails, are not explicitly disclosed. As discussed below, Appellant believes that “comprehensive shaking” refers to the vibration during loudspeaker operation.

The “tape” here refers to the “annulus” in Lindman, since Lindman previously refers to “double adhesive tape ... which has at least one hole” (column 1, lines 45-56). Appellant notes that the tape may be “more or less elastic” or “hard and non-elastic material”. Since this refers to the annulus overall, it is not clear whether this has any bearing on the adhesive of Lindman’s annulus.

However, it is clear that the elasticity properties of Lindman’s annulus may vary over a wide range, and no limitation on the elasticity of Lindman’s annulus is suggested. Appellant argues by inference that the lack of disclosure of limitations on the elasticity of Lindman’s annulus indicates a general lack of suggestion for any limitations on mechanical properties related to elasticity of the adhesive in Lindman’s annulus.

As noted in the present specification on page 3, line 20, the loss tangent “is a value obtained by dividing the viscosity by the elasticity,” and therefore is related to elastic properties of the

adhesive. Applicant submits that the general indication of a lack of importance of elasticity in Lindman's annulus argues that there is **no suggestion** in Lindman for the recited "maximum of loss tangent" limitations of the present claims.

The Examiner has responded to this argument by the Appellant in the final Office action of September 8, 2004, on pages 2-3. Specifically, the Examiner notes the disclosure in Lindman in column 2, lines 26-29, that: "When the tape used is more or less elastic, it can be used as a soft loudspeaker suspension, therewith obviating the need to use typical rubber packings to this end" (emphasis by the Examiner). The Examiner argues that "a suitable elasticity is clearly required by Lindman, so as to be able to obviate the need to use rubber packings."

Appellant argues, however, that this "suitable elasticity" (Examiner's term) is only being disclosed as being similar to that obtained with "typical rubber packings" of a suspension. There is no disclosure as to what specific mechanical properties "typical rubber packings" have. Moreover, the suspension of a loudspeaker is probably designed with regard to the sound qualities of the loudspeaker. There is no reason to believe that the behavior of such rubber packings would be correlated to the mechanical behavior of the adhesive on the annulus during a mechanical shock. (There certainly is no explicit suggestion in Lindman for such a relationship). Claim 1 specifically recites a limitation on a parameter measured at the "maximum characteristic frequency generated by a shock when said electronic device falls."

The Examiner also refers to Lindman's disclosure that "The use of hard and non-elastic material is also conceivable, although this use will depend on the application of the invention"

(emphasis by the Examiner). However, this phrase in the reference does not provide a motivation to optimize any parameter, since the “application of the invention” is completely unspecified. It is not even clear what this phrase is referring to.

Rather, Appellant argues that Lindman’s disclosure that “more or less elastic” or “hard and non-elastic material” may be used indicates that **the elasticity of the annulus in Lindman is not being in any way limited**. This fact, coupled with the fact that the elasticity of the **annulus** in Lindman is of uncertain relationship to any elasticity parameter of the **adhesive**, supports Appellant’s arguments that there is no suggestion in Lindman for the “maximum of loss tangent” limitations of the present claims.

In the final Office action of September 8, 2004, on pages 3-4, the Examiner refers to Lindman’s teaching (column 2, lines 20-24) that:

“It has been found that the bond afforded by a double adhesive annulus, ie an annulus that is adhesive on both sides, is sufficiently strong to resist comprehensive shaking forces, without requiring the assistance of additional fasteners such as screws to this end.”

The Examiner appears to argue that this somehow motivates one to optimize the “maximum of loss tangent” parameters recited in the claims so as to achieve the recited limitations (see page 4, lines 1-8, of the Office action).

Appellant respectfully disagrees. As noted above, Lindman does not define “comprehensive shaking forces” qualitatively or quantitatively. In Appellant’s view, this portion of Lindman indicates that the presumably prior art double adhesive annulus used by Lindman is sufficiently

strong for the purposes of Lindman, which relate to affixing a loudspeaker, in particular so as to “achieve **good sound production**” (column 1, lines 40-44). The “comprehensive shaking forces” are presumably those of **loudspeaker operation**. Even if the adhesive of Lindman’s annulus were adjusted to optimize sound production (an optimization for which there is no suggestion in the reference), there is no reason to believe that this would lead to the specific limitations on the adhesive recited in claim 1 (and relevant to dependent claims 2-4, 7 and 8):

“having a maximum of loss tangent in a frequency region equal to or larger than a maximum characteristic frequency generated by a shock when said electronic device falls, the maximum of the loss tangent being equal to or greater than 1.”

Appellant notes again that the parameters in claim 1 are specifically related to mechanical shock of dropping a device. Likewise, there is no reason to believe that optimizing sound production in Lindman would lead to the specific limitations recited in claim 5 (and relevant to dependent claim 6):

“having a maximum of loss tangent, at 25°C, in a frequency region equal to or larger than 10^3 Hz, the maximum of the loss tangent being equal to or greater than 1”

which are stated in terms of an explicit value of the frequency region lower limit.

Appellant further notes that claims 7 and 8 recite even higher values of the lower limit of the frequency region (10^4 and 10^5 Hz), even further away from what might be encountered in loudspeaker operation.

Appellant therefore argues that claims 1-8 are novel and non-obvious over Lindman.

Point 4. The compositional limitations of claims 5 and 6 are not obvious over Lindman.

Claim 5 recites a compositional limitation on the recited adhesive in the claim: “said adhesive layer comprises an acrylic copolymer containing, as a monomer component, acrylate including an alkyl group having 2-14 carbon atoms.” The Examiner has not cited any disclosure in Lindman regarding the composition of the adhesive of the annulus, and Appellant contends that Lindman is completely silent in this regard. The Examiner’s arguments that “double sided pressure sensitive adhesive of acrylic copolymer is notoriously well known” and that Applicant admitted that known acrylic adhesive compositions can be used have been addressed in point 2 above. Appellant has argued in point 2 above, that the Examiner’s inherency rejection regarding composition limitations of claims 5 and 6 is improper. Given that there is no disclosure of the compositional limitations in Lindman, claims 5 and 6 are clearly not anticipated by this reference.

Appellant here addresses the statement by the Examiner that “a suitable acrylic copolymer comprising a suitable alkyl group is ... an obvious selection and/or optimization to one of ordinary skill in the art of pressure sensitive adhesive, motivated by the desire to obtain adequate damping property and shock resistance” (Office action of April 28, 2004, page 4, second paragraph).

The Examiner’s argument is not clearly stated, but appears to follow the logic that (a) Lindman provides a motivation to optimize “damping property and shock resistance”, and further that (b) this would provide a motivation for varying the chemical nature of the adhesive of the annulus, and that (c) this would lead to selection of the chemical limitations recited in claim 5. Appellant reviews each logical step in this argument:

(a) Lindman refers to “obtaining the requisite seal and damping between the loudspeaker and the board so as to achieve good sound production” and to being “sufficiently strong to resist comprehensive shaking forces.” The “comprehensive shaking forces” apparently refer to loudspeaker operation, as discussed above. **“Shock resistance” is not discussed in Lindman.** “Shock resistance” is a purpose of the present invention (page 2, line 9), and appears in claim 1 in the “maximum characteristic frequency generated by a shock when said electronic device falls.” The reference to shock resistance by the Examiner is purely a hindsight reference to Appellant’s specification.

(b) Lindman never discloses how the “adhesive annulus 3” is obtained. The reference refers to this component by several terms, such as “double adhesive tape,” “adhesive tape annulus”, and in column 2, lines 2-3, refers to “elastic double adhesive material, such as elastic double adhesive tape”. Presumably, an available prior art adhesive tape is used in the reference. There is **no disclosure** regarding the chemical nature of this tape. The terms “acrylic” and “alkyl” do not appear in the reference, nor do any specific chemical terms. The mechanical properties of the adhesive of the annulus are not discussed. Appellant therefore argues that there is **no suggestion or motivation** in the reference for selecting a particular chemical composition of the adhesive, and in particular for the recited limitations of claim 5.

(c) As noted above, Lindman is apparently concerned with the performance of the loudspeaker. Optimization of the annulus with regard to the performance of the loudspeaker would almost certainly lead to an annulus with **quite different properties** than that of the present invention, since the present invention is designed to have excellent shock resistance, in particular

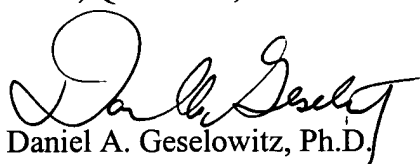
to dropping of a device. As such Lindman may be viewed as **teaching away** from the limitations of the present invention.

Accordingly, Appellant argues that claims 5 and 6 are novel and non-obvious over Lindman

In the event this paper is not timely filed, appellant hereby petitions for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP



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VIII. CLAIMS APPENDIX

Claim 1 (Previously presented): An electronic device structure, comprising:

an electronic device having a part;

a double coated pressure sensitive adhesive sheet affixed to said part of the electronic device,

and

an adhesive layer, which is provided on at least one surface of said double coated pressure sensitive adhesive sheet, having a maximum of loss tangent in a frequency region equal to or larger than a maximum characteristic frequency generated by a shock when said electronic device falls, the maximum of the loss tangent being equal to or greater than 1.

Claim 2 (Previously presented): The electronic device structure according to claim 1, wherein the maximum of the loss tangent of said adhesive layer at 25°C is in a frequency region equal to or greater than 10^3 Hz.

Claim 3 (Previously presented): The electronic device structure according to claim 1, wherein said electronic device is a portable telephone.

Claim 4 (Previously presented): The electronic device structure according to claim 2, wherein said electronic device is a portable telephone.

Claim 5 (Previously presented): A double coated pressure sensitive adhesive sheet for fixing a part of an electronic device, wherein the adhesive sheet comprises:

an adhesive layer, which is provided on at least one surface of said double coated pressure sensitive adhesive sheet, having a maximum of loss tangent, at 25°C, in a frequency region equal to or larger than 10^3 Hz, the maximum of the loss tangent being equal to or greater than 1, wherein

said adhesive layer comprises an acrylic copolymer containing, as a monomer component, acrylate including an alkyl group having 2-14 carbon atoms.

Claim 6 (Previously presented): A double coated pressure sensitive adhesive sheet according to claim 5, wherein said electronic device is a portable telephone.

Claim 7 (Previously presented): The electronic device structure according to claim 1, wherein the maximum of the loss tangent of said adhesive layer at 25°C is in a frequency region equal to or greater than 10^4 Hz.

Claim 8 (Previously presented): The electronic device structure according to claim 1, wherein the maximum of the loss tangent of said adhesive layer at 25°C is in a frequency region equal to or greater than 10^5 Hz.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

APPEAL BRIEF FOR THE APPELLANTS

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